The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Original) A vehicle apparatus comprising:

a travel direction command determining section configured to determine whether a forward travel command or a reverse travel command has been issued;

an electric motor counterelectromotive force detecting section configured to detect a counterelectromotive force of an electric motor that drives a wheel of a vehicle; and

a wheel rotational direction determining section configured to determine whether the wheel is rotating in an opposite direction to a vehicle travel direction command determined by the travel direction command determining section, based on a determination that a polarity of the counterelectromotive force detected by the electric motor counterelectromotive force detecting section does not match the vehicle travel direction command determined by the travel direction command determining section.

2. (Original) The vehicle apparatus as recited in claim 1, further comprising

an electric motor rotational speed detecting section configured to detect a rotational speed of the electric motor; and

a determination control section configured to allow the wheel rotational direction determining section to execute a determination when the electric motor rotational speed detected by the electric motor rotational speed detecting section is at least equal to a prescribed speed, and prohibit the wheel rotational direction determining section from

executing a determination when the electric motor rotational speed is less than the prescribed speed.

3. (Original) The vehicle apparatus as recited in claim 1, wherein

the wheel rotational direction determining section further configured to maintain a determined result made by the wheel rotational direction determining section until the vehicle stops, and reset the determined result when the vehicle restarts.

4. (Original) The vehicle apparatus as recited in claim 1, further comprising

a clutch engagement command section configured to command an engagement of a clutch disposed between the electric motor and the wheel when the electric motor is required to drive the wheel; and

a clutch engagement prohibiting section configured to prohibit the engagement of the clutch by the clutch engagement command section, when the wheel rotational direction determining section determines that the wheel is rotating in the opposite direction to the vehicle travel direction command determined by the travel direction command determining section.

5. (Original) The vehicle apparatus as recited in claim 1, further comprising:

a clutch engagement command section configured to command an engagement of a clutch disposed between the electric motor and the wheel when the electric motor is required to drive the wheel; and

a clutch engagement control section configured to drive the electric motor in a direction corresponding to the rotational direction of the wheel, and then allow the

engagement of the clutch by the clutch engagement command section, when the wheel rotational direction determining section determines that the wheel is rotating in the opposite direction to the vehicle travel direction command determined by the travel direction command determining section.

6. (Original) The vehicle apparatus as recited in claim 5, wherein the clutch engagement control section is further configured to allow the engagement of the clutch, when input and output rotational speeds of the clutch are substantially equal.

7. (Original) The vehicle apparatus as recited in claim 5, further comprising an electric motor output control section configured to control the electric motor to generate output torque in a direction corresponding to the vehicle travel direction command determined by the travel direction command determining section, when the clutch is engaged in accordance with the clutch engagement command section.

8. (Original) The vehicle apparatus as recited in claim 1, further comprising an internal combustion engine driving a non-electric motor driven wheel; and a generator driven by the internal combustion engine to generate electrical power to drive the electric motor.

9. (Original) The vehicle driving force control apparatus as recited in claim 8, further comprising a surplus torque computing section configured to compute a surplus torque that substantially corresponds to a difference magnitude by which a drive torque transferred from

the main drive source to a second wheel exceeds a road surface reaction force limit torque of the first wheel; and

a generator control section configured to control a generation load torque of the generator to substantially correspond to an acceleration slippage magnitude of the second wheel, when acceleration slippage is determined to be occurring in the second drive wheel.

10. (Original) The vehicle driving force control apparatus as recited in claim 9, wherein

the generator control section is further configured to compute an electric motor torque based on the surplus torque.

11. (Original) The vehicle apparatus as recited in claim 9, further comprising

an electric motor rotational speed detecting section configured to detect a rotational speed of the electric motor; and

a determination control section configured to allow the wheel rotational direction determining section to execute a determination when the electric motor rotational speed detected by the electric motor rotational speed detecting section is at least equal to a prescribed speed, and prohibit the wheel rotational direction determining section from executing a determination when the electric motor rotational speed is less than the prescribed speed.

12. (Original) The vehicle apparatus as recited in claim 9, wherein

the wheel rotational direction determining section further configured to maintain a determined result made by the wheel rotational direction determining section until the vehicle stops, and reset the determined result when the vehicle restarts.

13. (Original) The vehicle apparatus as recited in claim 9, further comprising

a clutch engagement command section configured to command an engagement of a clutch disposed between the electric motor and the wheel when the electric motor is required to drive the wheel; and

a clutch engagement prohibiting section configured to prohibit the engagement of the clutch by the clutch engagement command section, when the wheel rotational direction determining section determines that the wheel is rotating in the opposite direction to the vehicle travel direction command determined by the travel direction command determining section.

14. (Original) The vehicle apparatus as recited in claim 9, further comprising:

a clutch engagement command section configured to command an engagement of a clutch disposed between the electric motor and the wheel when the electric motor is required to drive the wheel; and

a clutch engagement control section configured to drive the electric motor in a direction corresponding to the rotational direction of the wheel, and then allow the engagement of the clutch by the clutch engagement command section, when the wheel rotational direction determining section determines that the wheel is rotating in the opposite

direction to the vehicle travel direction command determined by the travel direction command determining section.

15. (Original) The vehicle apparatus as recited in claim 14, wherein the clutch engagement control section is further configured to allow the engagement of the clutch, when input and output rotational speeds of the clutch are substantially equal.

16. (Original) The vehicle apparatus as recited in claim 14, further comprising an electric motor output control section configured to control the electric motor to generate output torque in a direction corresponding to the vehicle travel direction command determined by the travel direction command determining section, when the clutch is engaged in accordance with the clutch engagement command section.

17. (Original) A vehicle apparatus comprising:

travel direction command determining means for determining whether a forward travel command or a reverse travel command has been issued;

electric motor counterelectromotive force detecting means for detecting a counterelectromotive force of an electric motor that drives a wheel of the vehicle; and

a wheel rotational direction determining means for determining whether the wheel is rotating in an opposite direction to a vehicle travel direction command determined by the travel direction command determining means, based on a determination that a polarity of the counterelectromotive force detected by the electric motor counterelectromotive force detecting means does not match the vehicle travel direction command determined by the travel direction command determining means.

18. (Original) A method for a vehicle comprising:

determining whether a vehicle travel direction command has been issued is a forward travel command or a reverse travel command;

detecting a counterelectromotive force of an electric motor that drives a wheel of the vehicle; and

determining whether the wheel is rotating in an opposite direction to the vehicle travel direction command that has been determined, based on a determination that a polarity of the counterelectromotive force that has been detected does not match the vehicle travel direction command that has been determined.

19. (New) The vehicle apparatus as recited in claim 1, further comprising

a clutch engagement command section configured to selectively command engagement and disengagement of a clutch disposed between the electric motor and the wheel.

20. (New) The vehicle apparatus as recited in claim 19, wherein

the wheel rotational direction determining section is further configured to conduct the determination of the polarity of the counterelectromotive force when the clutch is engaged.

21. (New) The vehicle apparatus as recited in claim 19, wherein

the electric motor counterelectromotive force detecting section is further configured to detect the counterelectromotive force of the electric motor generated due to a slave rotation of the electric motor by the wheel upon the vehicle starting to move when the clutch is engaged.

22. (New) The vehicle apparatus as recited in claim 19, wherein

the clutch engagement command section is further configured to command the engagement of the clutch when a stopping state of the vehicle is detected.

23. (New) The vehicle apparatus as recited in claim 19, further comprising

an electric motor output control section configured to selectively control the electric motor to generate output torque in a direction corresponding to the vehicle travel direction command determined by the travel direction command determining section, when the clutch is engaged in accordance with the clutch engagement command section.

24. (New) The vehicle apparatus as recited in claim 19, wherein

the clutch engagement command section is further configured to engage the clutch upon determining the wheel has stopped rotating.

25. (New) The vehicle apparatus as recited in claim 24, wherein

the clutch engagement command section is further configured to disengage the clutch upon detection of a prescribed vehicle operating condition.

26. (New) The vehicle apparatus as recited in claim 19, wherein

the clutch engagement command section is further configured to disengage the clutch upon detection of a prescribed vehicle operating condition.